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REMARKS

Applicant appreciates the thorough examination of the present application as evidenced by the Office Action. Applicant submits that the rejections should be withdrawn as the claims are patentable over the cited art for the reasons discussed below.

The Section 103 Rejections

Claims 1-7 and 9-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over United States Patent No. 5,494,462 to Auclair ("Auclair") in view of United States Patent No. 5,422,438 to Lamome ("Lamome"). Claim 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Auclair and Lamome in view of U.S. Patent No. 5,494,462 to Polidori ("Polidori").

To establish a prima facie case of obviousness, the prior art reference or references when combined must teach or suggest *all* the recitations of the claim, and there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. M.P.E.P. § 2143. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. M.P.E.P. § 2143.01, citing *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). To support combining references, evidence of a suggestion, teaching, or motivation to combine must be **clear and particular**, and this requirement for clear and particular evidence is not met by broad and conclusory statements about the teachings of references. *In re Dembiczak*, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). The Court of Appeals for the Federal Circuit has also stated that, to support combining or modifying references, there must be **particular** evidence from the prior art as to the reason the skilled artisan, with no knowledge of the claimed invention, **would have selected these components for combination in the manner claimed.**

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In re Kotzab, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000). Respectfully, as will be discussed below, the Official Action fails to meet the requirements for a showing of obviousness under § 103.

Independent Claims 1, 13 and 22 Are Patentable Over the Cited References

The Office Action acknowledges that:

Auclair doesn't show the socket insert being tubular and being adapted to be deformed by the clamping means into retaining engagement with the electrical conductor, wherein the electrical conductor is received within the tubular socket insert to position the socket insert between the clamping member and the electrical connector and between an opposing surface of the socket relative to the clamping member and the electrical conductor.

(Office Action, p. 3). The Office Action asserts that Lamome discloses the recitations of Claim 1 not disclosed or suggested by Auclair and that one of skill in the art would be motivated to modify Auclair to include the "tubular socket insert" of Lamome "to help strength the connection formed between conductors, preventing them from slipping." (Office Action, p. 3).

As an initial matter, contrary to the assertion of the Office Action, Auclair simply does not disclose a socket insert, tubular or otherwise. The "socket insert (12) within the tubular socket (22) so as to reduce the effective size of the socket (22)" cited in the Office Action at page 2 is actually the ground rod 12. The ground rod 12 is the electrical member the wires are to be connected to by the clamp 10. It is not a "socket insert" as recited in Claim 1 for facilitating a connection to a wire but rather is the conductor that is being connected to the wire in the clamp without any additional socket insert.

Furthermore, Applicant respectfully submits that there is no basis to support combining Auclair and Lamome to arrive at the present invention as recited in Claim 1. First, the ground rod 12, as discussed above, is not operative as a "socket insert" in Auclair but is one of the members being connected. In contrast, the crimp barrel 3 of Lamome operates to receive and connect two wires. One of skill in the art would not

combine the cited references in this manner as there would be no motivation to replace the ground rod 12 of Auclair with the crimp barrel 3 of Lamome as the entire purpose of Lamome is to provide a connection to a ground rod 12. One of skill in the art would clearly not be motivated to provide a tubular ground rod that was collapsed to form a connection given the structural implications for the ground rod 12.

Furthermore, contrary to the assertion of the Office Action at page 3 that one of skill in the art would be motivated to make the combination to "strengthen the connection between conductors," no such motivation exists as doing so could actually weaken the ground rod and, potentially, make the electrical connection between the wires and the ground rod less reliable after deformation of the insert. Accordingly, the rejections of Claim 1 should be withdrawn for at least these reasons. Independent Claims 13 and 22 are patentable for substantially the same reasons. Furthermore, the claims depending therefrom are patentable at least based on the patentability of the claims from which they depend.

More generally, as discussed above, Auclair is directed to a ground rod clamp "for clamping a ground rod and at least one ground wire" that "employs a clamp body and a bolt." (Auclair, Abstract). In contrast, Lamome describes an electrical crimp connector "for forming a butt splice between two or more elongate electrical conductors." (Lamome, Col. 1, lines 24-26). Bolt and crimp type connectors are two distinct types of connectors with distinct applications.

Furthermore, Auclair provides a connection between a ground rod and one or more wires extending longitudinally adjacent thereto so as to provide a side-by-side connection. Lamome describes a crimp connection with one wire inserted into each end for an end-to-end connection. Auclair uses a single bolt contact point to connect the ground rod and wires while Lamome uses two distinct crimping force point applications to engage the respective wires. (Compare Auclair, Fig. 4 with Lamome, Fig. 2). Claim 1 has been amended above to expressly recite the bolt recitations of previously pending Claim 7 to further point out this distinction. Thus, there is no basis to support combining these references in the manner relied on in the rejections.

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Accordingly, all the rejections should also be withdrawn as there is no clear and particular evidence to support combining the references in the manner asserted in the rejections.

Independent Claim 22 is Patentable Over the Cited References

Claim 22 has been amended to recite that the insert is "movably" positioned within the socket. Claim 22 has also been amended to recite, as described at page 2 of the present application, that the insert has "a diameter selected to reduce an effective diameter of the socket to reduce eccentricity of positioning of the electrical conductor within the electrical connector." In contrast, the crimp barrel 3 of Lamome is bonded to the insulating sleeve by "a layer of adhesive 7 coated onto the internal surface of the insulating sleeve." (Lamome, Col. 4, lines 51-54). In addition, neither the crimp barrel 3 of Lamome nor the ground rod 12 of Auclair have a diameter selected to reduce an effective diameter and neither reduces "eccentricity of positioning" of connected wires. Accordingly, the rejection of Claim 21 should be withdrawn for at least these reasons in addition to the reasons discussed above related to the unsupportable nature of the combination of Auclair and Lamome.

Various of the Dependent Claims Are Separately Patentable

The dependent claims are all patentable by virtue of the patentability of the independent claims from which they depend as discussed above. Furthermore, various of the dependent claims are patentable for reasons presented in Applicant's Amendment filed July 31, 2002. Such arguments will not be duplicated herein, however, they are incorporated herein by reference as if set forth in their entirety.

In addition to the reasons for separate patentability discussed in the previous Amendment, Claims 3, 9, 11, 15, 16 and 23 have been amended to clarify that the castellated or corrugated profile is on the outer surface of the insert. While Applicant believes this amendment does not change the scope of the claims, the claims have been amended based on the Office Action's assertion that Lamome "discloses the

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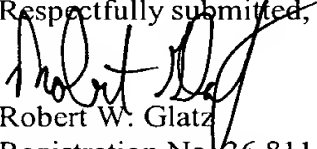
socket insert (3) having a corrugated profile (formed by 8)." (Office Action, p. 4).

While Applicant submits that the teeth 8 do not disclose a "profile" as recited in these claims, the claims have been amended to clarify that the recited profile shape is present on the outer surface of the insert as illustrated, for example, in Figures 2 and 5 of the present application. Accordingly, the rejections of Claims 3, 9, 11, 15, 16 and 23 should also be withdrawn for at least these additional reasons.

New Claims 24 and 26 recite that the socket insert is "movably positioned in the socket when not contacted by the clamping member." Accordingly, these claims are separately patentable for the reasons discussed above with reference to the "movably" recitation of Claim 21. New Claims 25 and 27 depend, respectively, on Claims 24 and 26. They further recite "the socket insert has a diameter selected to reduce an effective diameter of the socket to reduce eccentricity of positioning of the electrical conductor within the socket." Accordingly, they are also separately patentable for the reasons discussed above with reference to the corresponding recitations of Claim 21.

Conclusion

Applicant respectfully submits that, for the reasons discussed above, the references cited in the present rejections do not disclose or suggest the present invention as claimed. Accordingly, Applicant respectfully requests allowance of all the pending claims and passing this application to issue.

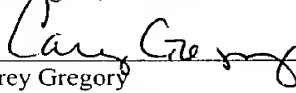
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Certificate of Mailing under 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on December 19, 2002.



Carey Gregory
December 19, 2002
287791

Version With Markings to Show Changes

In the Claims:

Please replace Claims 1 and 3 with the following.

1. (Twice Amended) An electrical connector comprising a connector body including a tubular socket configured to receive an electrical conductor, clamping means arranged to secure the electrical conductor within the socket, and a socket insert fitting within the tubular socket so as to reduce the effective size of the socket, wherein the socket insert is tubular and is adapted to be deformed by the clamping means into retaining engagement with the electrical conductor and wherein the clamping means comprises at least one clamping bolt held in respective threaded bores in the connector body such that the at least one clamping bolt extends into the socket so as to clamp, via the socket insert, an electrical conductor inserted in the socket against an opposing surface of the socket.

3. (Twice Amended) A connector as claimed in Claim 1, wherein the socket insert has at least one of a castellated or corrugated profile on an outside surface thereof.

Please cancel Claim 7 without prejudice.

Please replace Claims 9, 11, 15, 16, 21 and 23 with the following.

9. (Twice Amended) A socket insert for an electrical connector having a socket in which, in use, an electrical conductor is received, the socket insert comprising a tubular and deformable member having a at least one of a castellated or corrugated profile on an outside surface thereof.

11. (Twice Amended) A socket insert as claimed in Claim 9 wherein the socket insert has a castellated profile on an outside surface thereof.

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15. (Amended) The electrical connector of Claim 14 wherein the socket insert has a castellated profile on an outside surface thereof.

16. (Amended) The electrical connector of Claim 14 wherein the socket insert has a corrugated profile on an outside surface thereof.

21. (Amended) A socket insert for an electrical connector, the socket insert comprising a tubular member configured to be movably positioned within an internal socket of the electrical connector and to be deformed by a clamping member of the electrical connector into retaining engagement with an electrical conductor within the [electrical connector] socket insert, the socket insert having a diameter selected to reduce an effective diameter of the socket to reduce eccentricity of positioning of the electrical conductor within the electrical connector.

23. (Amended) The electrical connector of Claim 23 wherein the socket insert has at least one of a castellated or corrugated profile on an outer surface thereof.

Please add the following new claims.

24. (New) The electrical connector of Claim 13 wherein the socket insert is movably positioned in the socket when not contacted by the clamping member.

25. (New) The electrical connector of Claim 24 wherein the socket insert has a diameter selected to reduce an effective diameter of the socket to reduce eccentricity of positioning of the electrical conductor within the socket.

26. (New) The electrical connector of Claim 22 wherein the socket insert is

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movably positioned in the socket when not contacted by the clamping member.

27. (New) The electrical connector of Claim 26 wherein the socket insert has a diameter selected to reduce an effective diameter of the socket to reduce eccentricity of positioning of the electrical conductor within the socket.